What is claimed is:

1. A method for creating a content-rich repository under a User direction, comprising the steps of:

   a. providing a common language for defining a schema;

   b. providing a standard database structure defined by a standard schema using the provided common language;

   c. importing a content file having at least one of an incoming raw content file comprising an item file structure having at least one incoming item, and an incoming schema file defining the incoming raw content file;

   d. determining at least one difference between the incoming content file and a standard database as a delta analysis;

   e. value-added mapping of the imported raw content file according to the provided standard schema and the delta analysis;

   f. publishing the mapped content as a content-rich repository, and

   g. providing a graphical User interface for the User to direct performing steps a. through f.

2. The method of claim 1, wherein said importing step (c.) further comprises the step of:

   c.1 selecting the content file to import;

   c.2 mapping the incoming schema file to the standard schema, and

   c.3 manually appending a branch of the incoming schema file to a branch of the standard schema.

3. The method of claim 1, wherein said publishing step (f.) further comprises the step of:

   (f.1) creating the mapped content in an environment of the User.

4. The method of claim 1, wherein said importing step (c.) further comprises the step of:

   c.4 importing the content file having a format selected from the group consisting of Microsoft ® Access, Microsoft ® Excel, comma-separated-variables (CSV) and eXtensible

Markup Language (XML).

5.   The method of claim 1, wherein:

said mapping step (e.) further comprises the steps of:

e.1   mapping the incoming item file structure to the standard database structure,

e.2   building custom rules to validate the at least one incoming item,

e.3   defining special characters to be removed from the at least one incoming
item when performing the importing step, and

e.4   defining replacements for specific words in the at least one incoming item; and

the importing step (c.) further comprises the steps of -

c.5   removing the defined special characters from the at least one incoming item, and

c.6   replacing the specific words with the defined replacements in the at least one
incoming item.

6.   The method of claim 1, further comprising the steps of:

h.   using the provided graphical User interface by a User to direct steps (a.) - (g.);
and

3.   tracking an importing step by at least one of an ID of a User directing the
importing step, a date of the importing step and a time of the importing step.

7.   The method of claim 1, wherein said determining step (d.) further comprises the steps of:

d.1   identifying/reporting differences between a existing catalog item and an incoming
item update;

d.2   providing a list comprising a new incoming item and an incoming item that is an
update to an existing item as a comparative report of "before and after update".

8.   The method of claim 7, wherein:

said determining step (d.) further comprises performing one of the steps of -

d.3   appending a new incoming item to a specified schema branch, and

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d.4   overwriting an existing item with an incoming update.

9.   The method of claim 1, wherein said mapping step (e.) further comprises the steps of:

    e.5   spell-checking a product detail against a dictionary having at least one word;

    e.6   adding a custom word to the dictionary.

10.   The method of claim 1, wherein said mapping step (e.) further comprises the step of:

    e.7   changing case on a text field of an item.

11.   The method of claim 1, wherein said mapping step (e.) further comprises the step of:

    e.8   performing a find/replace for a given text on a pre-determined range of items.

12.   The method of claim 1, wherein said mapping step (e.) further comprises the steps of:

    e.9   providing a set of standard supplier and manufacturer names; and

    e.10   validating a supplier and a manufacturer name of an item against the provided set of standard supplier and manufacturer names.

13.   The method of claim 1, wherein said mapping step (e.) further comprises the step of:

    e.11   data mining of an imported item by performing one or more of the steps of-

       e.11.1   editing the item;

       e.11.2   attaching an image to the item; and

       e.11.3   applying a normalization function to the item.

14.   The method of claim 13, wherein the normalization function is at least one of spell check, find/replace, change case, and validate supplier name.

15.   The method of claim 1, wherein said mapping step (e.) further comprises the step of:

    e.12   defining and maintaining at least one accessory item for an other item by performing one or more of the steps of -

       e.12.1   identifying with an item identification an existing item as an accessory;

e.12.2 associating the accessory with an other existing item through the accessory item identification, said association including a quantity associated and a type of association for the accessory with the other existing item;

e.12.3 providing for maintenance of the association including adding, editing and deleting an association of an accessory with an item.

16. The method of claim 1, wherein said mapping step (e.) further comprises the steps of:

e.13 associating at least one User-specified keyword with at least one synonym therefor; and

e.14 adding the associated synonym to search criteria whenever the keyword is used in a text search.

17. A method for viewing a content-rich repository as a web catalog, comprising the steps of:

utilizing a web browser for viewing the content-rich repository;

navigating, while viewing with the provided browser, a referencing schema of a content-rich repository to a class, said referencing schema comprising a class hierarchy including at least the class navigated to; and

viewing with the provided Web browser at least one item of the content-rich repository corresponding to the class navigated to.

18. The method of claim 17, further comprising performing at least one of the steps of:

searching the content-rich repository corresponding to the class navigated to in the referencing schema for at least one found item having at least one specified keyword; and

searching the content-rich repository corresponding to the class navigated to for at least one found item satisfying at least one parametric search input.

19. The method of claim 18, further comprising the steps of:

displaying at least one detail of the at least one found item in a view page;

selecting a specific one of the at least one found item displayed in the view page; and

enabling modification of at least a specific one of the at least one detail of the selected

item.

20. The method of claim 18, further comprising the steps of:

specifying filtration operators;

filtering the class navigated to with said filtration operators to obtain a filtered set of items of said class; and

displaying said filtered set of items in a view page.

21. The method of claim 1, wherein said publishing step (f) further comprises the step of:

f.2   initiating at least one stored procedure to publish at least one rich-content repository in at least one of a pre-defined output format.

22. The method of claim 1, wherein said publishing step (f) further comprises the step of:

f.3   executing a stored procedure to migrate and update rich-content repository in accordance with at least one requirement of a Catalog Web application.

23. A method for administering a rich-content repository having a tree-structured schema of a plurality of classes of items having attributes, comprising the steps of:

copying items from a first schema class to a second schema class;

maintaining at least one attribute name as a set of names for each of said plurality of classes;

enabling inheritance of attributes by a child schema from a parent schema of the tree-structured schema;

optionally, reflecting changes in an item in every schema class having the same item;

optionally, defining, modifying, and deleting a default attribute value for each attribute and a global pattern for each attribute; and

performing at least one of defining, modifying and deleting information for at least one of each of a User, a User group, a product view, a shopper group, a quantity based discount, a promotional price, and a price markup.

24. The method of claim 23, further comprising the steps of:

for a User group -

i. authorizing group access to at least one schema branch; and

ii. generating a site-map for a User group according to the authorized access.

25. The method of claim 23, further comprising the steps of:

for a product view -

i. displaying the tree-structured schema in a tree-like structure;

ii. selecting at least one schema branch and a schema class thereof for inclusion in the product view; and

optionally, de-selecting an individual item from the selected schema class.

26. The method of claim 23, further comprising the step of:

for a shopper group, setting an option for one of inclusion and exclusion of the price markup during price calculation.

27. The method of claim 23, further comprising the step of:

for the price markup, associating the price markup with at least one of a shopper group, a class, and an item.

28. The method of claim 23, further comprising the step of:

for the quantity based discount, associating with a specified item the percentage discount for at least one given quantity range.

29. The method of claim 23, further comprising the steps of:

for a promotional price -

i. specifying the promotional price as an alternative to a basic selling price for a specified item, and

2. setting the validity period for the promotional price.

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30.   A method for defining and maintaining a rich-content repository of rich-content items, comprising the steps of:

providing a referencing schema definition having a tree-like schema class structure including a plurality of schema branches for a rich-content repository comprising at least one rich-content item definition optionally specifying a manufacturer;

creating and maintaining at least one rich-content item corresponding to said at least one item definition;

performing one of a copy and a move of said at least one rich-content item across a plurality of schema branches;

optionally, attaching at least one logo to the manufacturer specification of the at least one item definition;

including an indicator with the at least one logo that the at least one attached logo is to be displayed whenever the manufacturer is displayed;

attaching an image and an automatically generated thumbnail to an item;

navigating the rich-content repository according to the referencing schema while viewing individual items associated with each class;

searching the rich-content repository for at least one item having at least one specified keyword; and

locating a specific set of items using parametric search inputs.

31.   A method for syndicating a rich-content repository, comprising the steps of:

selecting a schema and at least one item to be exported for a specific customer;

defining a structure for the exported at least one item;

exporting the selected schema and at least one item in the defined structure; and

replicating at least one rich-content search capability in a specified environment.

32.   The method of claim 31, wherein said defining step further comprises the step of defining a structure as a format selected from the group consisting of Microsoft ® Access, Microsoft ® Excel, comma-separated-variables (CSV) and eXtensible Markup Language (XML).

33. The method of claim 31, wherein said defining step further comprises mapping a standard structure of the rich-content repository with a customer specific data structure.

34. The method of claim 31, wherein:

said selecting step further comprises the step of selecting item updates only; and

said exporting step further comprises one of exporting all selections and re-exporting updates only.

35. The method of claim 31, wherein said selecting step further comprises the steps of:

defining at least one specific first word for replacement with a corresponding at least one specific second word; and

replacing said at least one specific first word with said corresponding at least one specific second word.

36. The method of claim 31, further comprising the step of tracking the export step with a User/date/time stamp.

37. A method for navigating a rich-content repository, comprising the steps of:

providing a means for User-directed traversal, search, and display of the rich-content repository;

providing the means for traversal and display in a specified development environment;

displaying a product view that includes a manufacturer logo when the logo is in the repository; and

tracking all searches.

38. The method of claim 37, further comprising the steps of: -

calculating a marked-up price based on at least one of a prioritization of a markup and a define option for inclusion/exclusion of a markup for a specific customer group;

calculating a promotion price using the marked-up price and optionally, a promotional

price;

calculating a quantity-based price of the marked-up price using a discount information of the quantity-based price; and

displaying at least one of a selling price, promotional price and quantity-based price, as applicable.

39.   A method for mapping a first schema to a second schema - each having a hierarchy of at least one class structure, comprising:

·   receiving the first schema having at least one file format;

·   selecting a component of the first schema and at least one class structure of the second schema; and

c.   mapping the selected component into the selected class structure in accordance with a pre-stored template.

40.   The method of claim 39, wherein said mapping step (c) further comprises the steps of:

c.1   modifying a pre-stored template; and

c.2   saving the modified template as a pre-stored template.

41.   The method of claim 39, wherein said mapping step (c) further comprises the steps of:

c.3   determining rules for mapping the component of the first schema into a class structure of the second schema;

c.4   creating a template from the determined rules; and

c.5   saving the created template as a pre-stored template.

42.   The method of claim 39, wherein said mapping step (c) further comprises the step of:

c.6   assigning at least one pre-defined synonym to the mapped component as an assigned synonym such that the mapped component can be accessed by the assigned synonym.

43.   The method of claim 39, wherein said receiving step (a) further comprises the steps of:

a.1   receiving the first schema in at least one format selected from the group consisting of MS Access, XML. CSV, and MS Excel;

a.2   mapping synonyms to the external-file class structure;

a.3   selecting a pre-stored template to be used to map a class structure of the first schema to a class structure of the second schema.

a.5   mapping the class structure of the first schema to the class structure of the second schema using the selected template.

44.   The method of claim 43, wherein said receiving step (a) further comprises the step of:

a.6   storing the mapped schema file in at least one database selected from the group consisting of Oracle, MS SQL, Sybase, MS Access, and DB2.

45.   a system for creating and maintaining a rich-content repository, comprising:

a host system;

at least one database within said host system for storing the rich-content repository having a plurality of item information defined by a standard schema wherein the standard schema is defined by a common language;

a computer processor within said host system configured to create and maintain the rich-content repository; and

a User input/output interface within said host system interfaced to said computer processor and said rich-content repository for a User to interactively monitor and direct the processor in creation and maintenance of the rich-content repository.

46.   The system of claim 45, wherein said computer processor is further configured to:

import a raw content file comprising an incoming raw content file and an incoming schema file defining the incoming raw content file;

perform a delta analysis to determine at least one difference between the incoming raw content file and the standard schema;

map the imported raw content file to a mapped file according to the standard schema and the delta analysis;

update the rich-content repository with the modified mapped file.

47.   The system of claim 46, wherein the computer processor is further configured to publish at least a part of the rich-content repository as at least a second rich-content repository.

48.   The system of claim 47, wherein the computer processor is further configured to syndicate at least a part of the rich-content repository.

49.   The system of claim 48, wherein said User input/output interface is configured to allow a User to:

monitor the progress of at least one of said import, delta analysis, mapping, update, publish and syndication functions; and

modify the mapping by predetermined at least one of a word substitution, a spell check, a pattern matching substitution, an accessory, a synonym substitution, a user profile, a supplier information, a product view, a pricing information, and a quality approval.

50.   The system of claim 46, further comprising at least one remote communication facility interfaced via a network to said host system to transmit at least one said raw content file from the remote communication facility over the network to the host system.

51.   A system for providing access to at least one of a published and syndicated rich-content repository created using the method of claim 1, comprising:

a host system;

at least one database within said host system that stores the at least one of a published rich-content repository and a syndicated rich-content repository;

a computer processor within said host system configured to access the at least one of a published rich-content repository and a syndicated rich-content repository stored on the at least one database; and

a User input/output interface within said host system interfaced to said computer processor and said rich-content repository for a User to interactively direct the processor to access the rich-content repository.

52. The system of claim 51, further comprising a network interface to the host system configured to enable access over the network to the least one of a published rich-content repository and a syndicated rich-content repository stored on the at least one database.

53. The system of claim 52, further comprising a remote interface to access over the network via the network interface the least one of a published rich-content repository and a syndicated rich-content repository stored on the at least one database.

54. The system of claim 53, wherein said remote interface is a remote computer system.

55. The system of claim 53, wherein the User input/output interface is the remote interface.

56. The system of claim 53, wherein said network is the Internet.

57. The system of claim 56, wherein the User input/output interface is a web browser.

58. A method for creating and maintaining a rich-content repository, comprising the steps of:
   providing a host system;
   defining the rich-content repository as a plurality of item information defined by a standard schema wherein the standard schema is defined by a common language;

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providing at least one database within the host system for storing the rich-content repository as defined;

providing a computer processor within the host system configured to create and maintain the rich-content repository;

the processor creating and storing the rich-content repository as defined in the database;

providing a User input/output interface within the host system interfaced to said computer processor and said rich-content repository; and

the User interactively monitoring and directing the creation and maintenance of the rich-content repository by the computer processor and the storage thereof in the at least one database.

59.   The method of claim 58, further comprising the steps of:

importing a raw content file comprising an incoming raw content file and an incoming schema file defining the incoming raw content file;

performing a delta analysis to determine at least one difference between the incoming raw content file and the standard schema;

mapping the imported raw content file to a mapped file according to the standard schema and the delta analysis; and

updating the rich-content repository with the modified mapped file.

60.   The method of claim 59, further comprising the step of publishing at least a part of the rich-content repository as at least a second rich-content repository.

61.   The method of claim 60, further comprising the step of syndicating at least a part of the rich-content repository.

62.   The method of claim 61, further comprising the steps of:

monitoring the progress of at least one of said importing, performing delta analysis, mapping, updating, publishing and syndicating steps; and

modifying the mapping step by a predetermined at least one of a word substitution, a spell check, a pattern matching substitution, an accessory, a synonym substitution, a user profiles, a supplier information, a product view, a pricing, and a quality approval.

63. The method of claim 59, further comprising the steps of:

providing at least one remote communication facility interfaced via a network to said host system; and

transmitting at least one said raw content file from the remote communication facility over the provided network to the host system.

64. A method for providing access to at least one of a published and syndicated rich-content repository created using the method of claim 1, comprising the steps of:

providing a host system;

providing the rich-content repository as a plurality of item information defined by a standard schema wherein the standard schema is defined by a common language;

providing at least one database within said host system that stores the at least one of a published rich-content repository and a syndicated rich-content repository defined by the standard schema;

providing a computer processor within said host system configured to access the at least one of a published rich-content repository and a syndicated rich-content repository stored on the at least one database; and

providing a User input/output interface within said host system interfaced to said computer processor and said rich-content repository for a User to interactively direct the processor to access the rich-content repository.

65. The method of claim 64, further comprising the step of providing a network interface to the host system configured to enable access over a network to the at least one of a published rich-content repository and a syndicated rich-content repository stored on the at least one database.

66. The method of claim 65, further comprising the step of providing access over the network via the network interface to the least one of a published rich-content repository and a syndicated rich-content repository stored on the at least one database.

67.   The method of claim 66, further comprising the steps of:

        providing said User input/output interface at a remote site; and

        interfacing said remote User input/output interface over a network via the network interface to the host system.

68.   The method of claim 67, wherein the network interface is the Internet.

69.   The method of claim 68, wherein the User input/output interface is a web browser.

70.   The method of claim 64, wherein the network interface is the Internet.

71.   The method of claim 70, wherein the User input/output interface is a web browser.

72.   The method of claim 65, wherein the network interface is the Internet.

73.   The method of claim 72, wherein the User input/output interface is a web browser.

74.   The method of claim 66, wherein the network interface is the Internet.

75.   The method of claim 74, wherein the User input/output interface is a web browser.

76   A method for supplying at least one content input to a rich-content repository under a User direction, comprising the steps of:

        for said at least one content input performing the steps of -

        providing a graphical User interface for the User to direct the method;

        creating, in a sequence of a plurality of stages under the User direction, a candidate update file to a rich-content repository comprising -

                i.   a raw content file having at least one content update action, and

                ii.   a corresponding referencing schema file for classifying the raw content file;

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optionally, reverting back to a previous stage of said plurality said at least one content update action;

aggregating in a single candidate update file said created candidate update file for each said at least one content input file; and

supplying to a rich-content publisher one of the aggregated content input file or a set comprising the candidate update file for each said at least one content input.

77. The method of claim 76, further comprising the steps of:

approving the at least one content update action by at least one approver;

performing the creating step only with respect to approved content update actions;

optionally, reworking a non-approved content update action and re-executing the approving and performing steps therefor; and

tracking the stage by an identification of the User directing the stage, a date of the stage and a time of the stage.

78. The method of claim 76, wherein said stages comprise at least identification, value extraction, quality assurance and publishing.

79. The method of claim 78, wherein said identification stage comprises the steps of:

selecting at least one item for data classification;

displaying the referencing schema as plurality of classes in a tree-like structure for classifying the selected at least one item;

forcing selected items to be associated with a specific displayed class; and

creating patterns for auto-recognition of the appropriate class relevant to said selected at least one item.

80. The method of claim 78, wherein said value extraction stage comprises the steps of:

selecting at least one item for value extraction;

building a set of at least one incoming/outgoing;

associating said built pattern set with at least one attribute name of a specified class; and

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extracting at least one attribute value from an item using the built pattern set for the associated at least one attribute name.

81.   The method of claim 78, wherein said quality assurance stage comprises the steps of:

providing at least one of a define, an edit and a view level of approval having a respond by time limit;

assigning at least one approver to each provided approval level;

submitting the content update actions having a respond by time limit for approval by the assigned approver;

notifying said approver of the content update actions for which the approver is authorized;

after notification, filtering and approving/rejecting of the submitted content update actions by the assigned approver;

when a content update action is rejected, notifying an originator of the rejection including at least one explanatory comment;

setting the status of a content update action by the approver; and

notifying a catalog administrator after a respond by time limit has been exceeded for a submitted action.

82.   A method for creating a second rich-content repository from a first single rich-content repository obtained by the method of claim 1, comprising the steps of:

selecting at least one item and a corresponding schema from the rich-content repository;

extracting the selected at least one item and its corresponding schema; and

creating the second rich-content repository from the extracted at least one item and corresponding schema.

83.   The method of claim 82, wherein the creating step further comprises creating the second rich content repository using the method of claim 1.

84.   The method of claim 82, wherein the creating step further comprises the steps of:

creating a view of the first repository as the selected at least one item as its corresponding schema; and

said creating step comprises creating the second repository as a virtual repository by accessing only the created view of the first repository.

85. A method of publishing a subset of a rich-content repository obtained by the method of claim 1, comprising the steps of:

receiving a request for a publication of at least part of the repository;

subsetting the repository in accordance with the received request;

publishing the subset; and

providing access to the subset.

86. A method of providing access to a rich-content repository obtained by the method of claim 1 comprising the steps of:

providing network access to the rich-content repository as a service;

providing network access to the rich-content repository via an application program; and

providing an interface to the rich-content repository via an application program interface (API).

87. The method in claim 86, wherein the application is one of an eProcurement application, a navigation system, a content browser application, a fulfillment system, a requisition system, and a content search engine.

88. The method of claim 87, wherein the provided eProcurement application is selected from the group consisting of Ariba, Procure+, SAP, and PeopleSoft.